



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/554,034	08/08/2006	Werner Agne	2002P15569WOUS	7805
22116 7590 12/31/2009 SIEMENS CORPORATION INTELLECTUAL PROPERTY DEPARTMENT 170 WOOD AVENUE SOUTH ISELIN, NJ 08830				
EXAMINER YAN, REN LUO				
ART UNIT 2854		PAPER NUMBER		
MAIL DATE 12/31/2009		DELIVERY MODE PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/554,034

Applicant(s)

AGNE ET AL.

Examiner

Ren L. Yan

Art Unit

2854

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 September 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11, 12, 16, 18, 22, 23, 29-31 and 34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11, 12, 16, 18, 22, 23, 29-31 and 34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 16 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 16 is indefinite because it appears to modify its parent claim 11 rather than to provide a further limitation as required. Claim 11 positively requires a correction factor is calculated by the control unit to regulate the movement of the drive unit while dependent claim 16 recites that a correction factor can be calculated by the control unit to regulate the movement of the drive unit. Thus, the recitation of claim 16 makes the claim indefinite.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kot (US 7,131,379) in view of DE 19723059.

With respect to Claim 29, Kot teaches (Figs 1 and 2 and column 4 lines 17 – 26 of Kot):

a method for operation of a printing press, the printing press comprising:
providing a print unit (3 – 7 and the image field including 8 and 9 in column 3 lines 57 - 58);
providing a drive unit (10 – 11) assigned to the print unit (3 – 7);
providing a control unit (12) for regulating the drive unit (10 – 11); and

providing a print mark measuring device and/or register mark measuring device and/or a register measuring device (13) wherein the print mark measuring device and/or the register mark measuring device and/or the register measuring device (13) are directly connected to the control unit (12); and

transmitting (the comparison signals from 18 are used in 19 in line 25) a print mark (9) signal and/or the register mark (9) signal from the print mark measuring device and/or the register mark measuring device (13 wherein 13 registers all the image field in column 4 lines 13 - 14) to the control unit (12), or

transmitting (the comparison signals from 18 are used in 19 in line 25) a register measuring (8) signal from the register measuring device (13) to the control unit (12).

Kot does not teach the print mark measuring device and/or the register mark measuring device and/or the register measuring device comprises an evaluation unit.

However, as discussed in pages 1 and 2 of the present specification, DE 19723059 disclose in a printing press with color register control wherein the register marks printed on the track are picked up by sensors and evaluated in a measurement head of the sensors.

Therefore it would have been obvious to a person of ordinary skill in the art at the time of invention was made to modify the printing press of Kot by including the evaluation unit in the measuring device as taught by DE 19723059 so as to predictably evaluate the register marks before sending the signals to the control unit thus speeding up printing registration control process.

Claims 11, 12, 16, 18, 22, 23, 30, 31 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kot in view of DE 19723059 and Tokiwa (US 6,626,102).

With respect to Claim 11, Kot disclosed in Figs 1 and 2 and column 4 lines 17 - 26:

a printing press, comprising:

a print unit (3 - 7 and the image field including 8 and 9 in column 3 lines 57 - 58);

a drive unit (10 - 11) assigned to the print unit (3 - 7);

a control unit (19) for regulating the drive unit (10 - 11); and

a print mark measuring device and/or register mark measuring device and/or a register measuring device (13 wherein 13 registers all the image field in column 4 lines 13 - 14), wherein

the print mark measuring device and/or the register mark measuring device and/or the register measuring device (13) are directly connected to the control unit (12).

Kot does not teach the print mark measuring device and/or the register mark measuring device and/or the register measuring device comprises an evaluation unit and does not teach that a correction factor is calculated by the control unit to regulate the movement of the drive unit.

As discussed in pages 1 and 2 of the present specification, DE 19723059 disclose in a printing press with color register control wherein the register marks printed on the track are picked up by sensors and evaluated in a measurement head of the sensors.

Tokiwa discloses (Fig. 3 and column 16 lines 5 – 24): a correction factor $((Y_n + Y_4 - Y_3))$ proportional in line 7) is (can be) calculated (line 6) by the control unit (3) to regulate the movement (line 15) of the drive unit (41).

Therefore it would have been obvious to a person of ordinary skill in the art at the time of invention was made to modify the printing press of Kot by including the evaluation unit in the measuring device as taught by DE 19723059 so as to predictably evaluate the register marks before sending the signals to the control unit thus speeding up printing registration control process. It would also have been obvious to a person of ordinary skill in the art at the time of invention was made to further modify the printing press of Kot and DE 19723059 by including the calculation of a correction factor in the control unit as taught by Tokiwa for the purpose of increasing the accuracy and speed in controlling the drive unit.

With respect to Claim 12, the modification/combination meets all the limitations of Claim 12 (Figs 1 and 2 and column 4 lines 17 – 26 of Kot):

the printing press, wherein the print mark measuring device and/or the register mark measuring device and/or the register measuring device (13 modified by Darby et al.) are connected by a means for signal transmission (arrow from 13 to 18) to the control unit (12).

With respect to Claim 18, Kot, as modified by DE 19723059 teaches all that is claimed except for the print mark measuring device and/or the register mark measuring device and/or the

register measuring device being connected to the control unit by a field bus system or a serial link.

However Tokiwa also discloses (column 1 lines 51 – 54): a field bus system (line 53) is used to connect the components in the printing press.

Therefore it would have been obvious to a person of ordinary skill in the art at the time of invention was made to further modify the printing press of Kot, as modified by including the field bus system for connection in the printing press as also taught by Tokiwa for the purpose of increasing the accuracy and speed in the connection of the measuring device and the control unit.

With respect to Claims 22, the applied prior art also meets the limitations of Claims 22 (column 1 lines 51 – 54 of Tokiwa): a field bus system (line 53) or a serial link is provided as means for signal transmission (receive in line 52).

With respect to Claim 23, the applied prior art teaches the limitations of Claim 23 for the reason above except for the control unit has a master functionality with regard to further drive units or with regard to further control units.

However Tokiwa discloses in Fig. 3 and column 7 lines 30 - 39: the control unit has a master functionality (1) with regard to further drive units or with regard to further control units (via the network line 5).

Therefore it would have been obvious to a person of ordinary skill in the art at the time of invention was made to further modify the combination of Kot and DE 19723059 by including the master section as also taught by Tokiwa for the purpose of synchronously controlling the printing registration to improve printing quality.

With respect to Claim 30, the applied prior art meets all the limitations of Claim 30 (Fig. 3 and column 16 lines 5 – 24 of Tokiwa): the method wherein a correction factor ($(Y_n + Y_4 - Y_3)$) proportional in line 7) for regulating the movement (line 15) of at least one drive unit (41) is calculated (line 6) by the control unit (3) from the print mark signal or from the register mark signal or from the register measuring signal (line 6).

Claims 31 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kot in view of Tokiwa.

With respect to Claim 31, Kot disclosed in Figs 1 and 2 and column 4 lines 17 - 26: a printing press, comprising:

- a print unit (3 – 7 and the image field including 8 and 9 in column 3 lines 57 - 58);

- a drive unit (10 – 11) assigned to the print unit (3 – 7), wherein the drive unit comprises an inherent motor and a power converter for processing a control signal coming from a control unit 12,

- the control unit (12) for regulating the drive unit (10 – 11), wherein the control unit comprising an integrated evaluation unit (18); and

- a print mark measuring device and/or register mark measuring device and/or a register measuring device (13 wherein 13 registers all the image field in column 4 lines 13 - 14), wherein the print mark measuring device and/or the register mark measuring device and/or the register measuring device (13) are directly connected to the control unit (12).

Kot may not teach that the drive unit(10-11) and the control unit (12) are integrated.

It has been held by the Court that simply making separate parts integral would only amount to a matter of obvious engineering choice that would have been obvious to those skilled in the art. In re Larson, 340 F.2d 965, 968, 144 USPQ 347, 349 (CCPA 1965) (A claim to a fluid transporting vehicle was rejected as obvious over a prior art reference which differed from the prior art in claiming a brake drum integral with a clamping means, whereas the brake disc and clamp of the prior art comprise several parts rigidly secured together as a single unit. The court affirmed the rejection holding, among other reasons, “that the use of a one piece construction instead of the structure disclosed in [the prior art] would be merely a matter of obvious engineering choice.”) In the present application, since Kot teaches all of the required structural elements of the claimed invention, to merely make two of the structural elements integral without changing the functionality of these structural elements, separately or in whole, would have been obvious to those skilled in the art.

Kot does not teach that a correction factor is calculated by the control unit to regulate the movement of the drive unit and does not teach that the print mark measuring device and/or the register mark measuring device and/or the register measuring device are connected to the control unit by a field bus system or a serial link.

However Tokiwa discloses (Fig. 3 and column 16 lines 5 – 24): a correction factor $((Y_n + Y_4 - Y_3))$ proportional in line 7) is calculated (line 6) by the control unit (3) to regulate the movement (line 15) of the drive unit (41).

It would have been obvious to a person of ordinary skill in the art at the time of invention was made to modify Kot’s printing press by including the calculation of a correction factor in the

control unit as taught by Tokiwa so as to predictably result in increasing the accuracy and speed in controlling the drive unit.

Tokiwa also discloses (column 1 lines 51 – 54): a field bus system (line 53) is used to connect the various components in the printing press.

It would also have been obvious to a person of ordinary skill in the art at the time of invention was made to modify Kot's printing press by including the field bus system for connection in the printing press as also taught by Tokiwa for the purpose of increasing the accuracy and speed in the connection of the measuring device and the control unit.

With respect to Claim 34, the combination teaches the limitations of Claim 34 for the reason above except the control unit has a master functionality with regard to further drive units or with regard to further control units.

However Tokiwa discloses in Fig. 3 and column 7 lines 30 - 39: the control unit has a master functionality (1) with regard to further drive units or with regard to further control units (via the network line 5).

It would have been obvious to a person of ordinary skill in the art at the time of invention was made to modify Kot's printing press by including the master section as also taught by Tokiwa for the purpose of synchronously controlling the printing registration to improve printing quality.

Applicant's arguments filed 9-22-2009 have been fully considered but they are not persuasive.

Applicant argued that the adjusting devices 10-11 in Kot do not include an “inherent” motor or power converter, instead, other components of Kot, such as the cylinder 6 and detector 13, are used to communicate with the control unit. This argument is not persuasive because its rationale can not be understood. The adjusting devices 10-11 in Kot are used to adjust the position of cylinder 6 and they would have the inherent motor or power converter for processing a control signal coming from the control unit 12 so as to carry out the position adjustment for the cylinder 6. Applicant's argument appears to suggest that the cylinder 6 in Kot can process a control signal from the control unit 12 and adjusts its position by itself without the motor or the power converter from the adjusting devices 10-11. This is clearly not how the position of cylinder 6 is adjusted in Kot.

Applicant further argued that to integrate the adjusting devices 10-11 into the control device 12 in Kot would destroy the operability of Kot and thus render the detector 13 meaningless, as any actuation of the adjusting devices 10-11 would similarly experienced by the control unit. This argument is not understood. To integrate the adjusting devices 10-11 into the control unit 12 only requires the adjusting devices 10-11 to be part of the control unit 12 without changing the functionality of the adjusting devices and the control unit 12. The control unit 12 with the integrated adjusting devices 10-11 would still require the detection signal from the detector 13 in order to control the adjusting devices 10-11. Therefore, this argument is also not persuasive.

Applicant also argued that Tokiwa merely discloses a corrected driving reference phase signal output provided by the control unit, and thus not a correction factor calculated by the control unit to regulate the movement of the drive unit as required by claims 11 and 31. The

Examiner respectfully disagrees. As pointed out in the above rejections, Tokiwa discloses (Fig. 3 and column 16 lines 5 – 24): a correction factor ($(Y_n + Y_4 - Y_3)$ proportional in line 7) is calculated (line 6) by the control unit (3) to regulate the movement (line 15) of the drive unit (41). In so far as the correction factor is defined in the pending claims, the teaching of Tokiwa fully meets the requirement that a correction factor is calculated by the control unit to regulate the movement of the drive unit as recited.

Applicant further argued that the Examiner misrepresented pages 1-2 of Applicant's specification, which merely discloses that a sensor in DE 19723059 communicates with a register controller to establish register deviation and concluded that neither Kot nor DE 19723059 alone or in combination discloses that the print mark measuring device and/or the register mark measuring device and/or the register measuring device comprises an evaluation unit and is directly connected to the control unit. This argument is not persuasive. As pointed in the forgoing rejections, Kot teaches a control unit 12 for regulating the drive unit 10 and the print mark measuring device and/or the register mark measuring device and/or the register measuring device 13 is directly connected to the control unit. Applicant's attention is again directed to his own specification on pages 1-2, specifically in [0005], where it discloses "The register marks printed on the track are picked up by sensors and evaluated in a measurement head of the sensor". It is clear from this disclosure that DE 19723059 teaches that the print mark measuring device and/or the register mark measuring device and/or the register measuring device (sensors) comprises an evaluation unit. Accordingly, the combination of Kot and DE 19723059 indeed fully teaches structural requirement of claim 11 as well as that of claim 29.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ren L. Yan whose telephone number is 571-272-2173. The examiner can normally be reached on 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Nguyen can be reached on 571-272-2258. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ren L Yan/
Primary Examiner, Art Unit 2854
Dec. 23, 2009